

# **Fungicide Evaluation in Almonds**

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Almond trees are treated annually for protection against an array of plant diseases. Along with the several diseases growers face, there is a list of fungicides from which to choose. Making decisions about fungicide choice and treatment timing for any given disease may have an effect on other diseases as well. Thus it is important to select fungicides that are effective against diseases known to be in the orchard and to apply them at the correct time.

Our objective with this research has been to evaluate various fungicide programs and new fungicides for effectiveness against several diseases.

Brown rot was the only disease that developed in sufficient amount in the 2001 season to allow evaluation of fungicides. Fungicides that provided good control of brown rot in comparison to the non treated control included Vanguard, Abound and Laredo. Auxigro and Trilogy did not provide statistical control of brown rot this year as they did last season. The 2001 test was a much more severe test of fungicide performance as the Neplus Variety, a highly susceptible one, was used for the test. Precipitation records show extended periods

of rain occurred after both blossom treatments providing very favorable disease conditions. Under such intense pressure, the suppression of blossom brown rot by Trilogy is noteworthy. This is the second time in our tests that a “soft” non-synthetically produced “organic” type product has shown potential for brown rot control. More evaluation will be required to optimize the performance of this product for almond disease control. Organic growers are now using multiple applications of a tank mix of Trilogy plus copper as their fungicide program.

Growers should plan a fungicide program that protects against brown rot during bloom and shot hole, scab, leaf blight and perhaps anthracnose later in the season. Trees are most susceptible to brown rot at full bloom so early timings should include a spray at or near full bloom. Later applications are aimed at the other diseases. Late bloom and post bloom fungicide choices should include at least one material with a broad spectrum of activity ( ie. Captan®, Ziram®).

	<b>Treatments</b>	<b>Rates/Ac</b>	<b>TIMINGS</b>			<b>Brown Rot Strikes*</b>					
						<b>REPS</b>				<b>Total</b>	<b>Mean</b>
			<b>2/8</b>	<b>2/22</b>	<b>3/8</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>		
1	Untreated Control	N/A	--	--	--	55	30	37	40	162	40.5 a
2	Trilogy®	@ 1% v/v	PB	--	Post B	20	14	19	15	68	17.0 a b
3	Trilogy®	@ 1% v/v	--	FB	Post B	22	13	49	6	90	22.5 a b
4	Trilogy®	@ 1% v/v	PB	FB	Post B	25	20	105	59	209	52.3 a
	Auxigro WP	@ 1 oz.									
5	Breakthru	@ 5 oz./100 gal	PB	FB	Post B	39	19	96	22	176	44.0 a
	Auxigro WP	@ 2 oz.									
6	Breakthru		PB	FB	Post B	72	14	47	41	174	43.5 a
	Auxigro WP	@ 4 oz.									
7	Breakthru		PB	FB	Post B	32	32	11	56	131	32.8 a b
8	Vanguard® 75 WG	@ 5 oz.	PB	FB	ZIRAM Post	7	2	2	8	19	4.8 c
9	Abound® 2EC	@ 15 fl. oz.	PB	FB	ZIRAM Post B	4	7	13	1	25	6.3 c
10	Laredo® 2EC	@ 8 oz.	PB	FB	Post B	4	2	2	18	26	6.5 c
11	Laredo® 2EC	@ 12.8 oz.	PB	FB	Post B	7	12	12	14	45	11.3 b c
Fishers LSD P=0.05											
* number of flower clusters infected with brown rot per 20 feet of fruitwood per single tree replicate.											

NICRAC Fungi rpt 01 needs data A